



The State of New Hampshire  
*Department of Environmental Services*



Michael P. Nolin  
Commissioner

September 30, 2005

Mr. Bob Beauregard  
Town of Swanzey Selectmen  
P.O. Box 10009  
620 Old Homestead Highway  
Swanzey, NH 03446

Dear Mr. Beauregard:

On behalf of the New Hampshire Department of Environmental Services (NHDES), I am pleased to provide the enclosed copy of the final Homestead Dam Feasibility Study for your use.

NHDES and its partners funded the study to address the dam's safety deficiencies, ensure the preservation of the 1832 Thompson Covered Bridge, and assist in the migration and spawning of anadromous fish. Several alternatives were evaluated to determine whether they would meet these primary project goals. The attached table attempts to summarize the main study findings in relation to these goals.

The study also provides a better understanding of the ecological outcomes, structural engineering constraints, fluvial geomorphology, socio-economics, historic and cultural resources, water quality concerns, fish habitat, and other issues associated with the various alternatives to remedy the problems posed by the dam.

One of the main uses of this information is to help the town of Swanzey as the community considers the pros and cons of replacing the dam (versus its permanent removal). The NHDES has asked the Town of Swanzey to make a decision on whether to take ownership of the dam, or not, by November 2005. If the Town agrees to obtain the dam, they will need to move forward with the appropriate Town approvals and hearings. If the Town does not take ownership of the dam, the current owner will pursue the dam removal option. Note that state, federal and private funding is available for the dam removal option, and the town would incur no expense. (The funding for necessary repairs to the Thompson Covered Bridge remains to be determined.) If the Town elects to take ownership and replace the dam, it will be responsible for all costs associated with the replacement. Please be aware that federal funding may be available for monitoring of fish passage effectiveness for the rock ramp alternative.

NHDES is distributing this report to ensure that public input during the decision-making process is thorough and that the community is fully aware of the issues. With this in mind, we ask that you carefully review the document. While the report certainly is not brief, we hope you will be able to review it entirely.

I want to take this opportunity to remind you that the NH Department of Environmental Services, NH Division of Historic Resources, US Fish and Wildlife Service, NOAA Restoration Center, Connecticut River Watershed Council, American Rivers, and many other partners are available to provide continued technical assistance with this potential project. Please don't hesitate to contact me if you have any questions or comments, or require any additional information. NHDES and its consultant will be willing to attend any future meetings where the dam's future is discussed.

Sincerely,

  
Deborah Loiselle  
River Restoration Coordinator

Enclosure

cc: See Service List



cc:

Mr. Bob Beauregard  
Ms. Beth Fox  
Mr. Doug Brown  
Mr. Gabe Gries  
Mr. Pablo Fleischmann  
Ms. Edna Feighner  
Mr. Richard Scaramelli  
Mr. Jim Turek  
Mr. Scott Self  
Mr. Lee Dunham  
Mr. William Snyder  
Mr. Fred R. Pitcher  
Mr. Bruce Bohannon  
Ms. Sara Carbonneau  
Mr. Sylvester Karasinski  
Mr. Mike Morrison  
Mr. Tom Warner  
Mr. Steve Knowlton  
Ms. Barbara Skully  
Mr. William Neidermeyer  
Mr. Richard Roach  
Mr. John MaGee  
Mr. John Asseng

**Summary of Project Goals by Alternative  
Homestead Dam Feasibility Study**

	A		B	C1T		C2T	C1C		C2C	D	E
Issue/Resource	No Action		Full Removal	New Timber Crib Dam with Denil Fishway		New Timber Crib with Natural Bypass	New Concrete Dam with Denil Fishway		New Concrete Dam with Natural Bypass	Rock Ramp	Hydropower
30-year Life Cycle Cost Estimate	\$	-	\$ 210,719	\$	1,993,429	\$ 1,868,563	\$	2,422,136	\$ 2,297,267	\$ 1,089,265	\$ 5,132,550
Estimated 30-Year Revenue Genera	\$	-	\$ -	\$	-	\$ -	\$	-	\$ -	\$ -	\$ 3,105,000
Dam Safety	Unacceptable risk		No liability	Acceptable		Acceptable	Acceptable		Acceptable	Acceptable	Acceptable
Fish Passage	Limited downstream passage.		Full passage. Best alternative with regard to fish passage.	Improved passage.		Improved passage.	Improved passage.		Improved passage.	Improved passage.	Improved passage.
Thompson Covered Bridge	Bridge at risk from possible uncontrolled dam breach. NHDOT recommends new center pier foundation within 10 years to remedy existing scour problem.		Eliminates risk of uncontrolled dam breach damage. NHDOT recommends new center pier foundation prior to removal.	Minimizes risk of damage from uncontrolled breach. NHDOT recommends new center pier foundation within 10 years to remedy existing scour problem.		Minimizes risk of damage from uncontrolled breach. NHDOT recommends new center pier foundation within 10 years to remedy existing scour problem.	Minimizes risk of damage from uncontrolled breach. NHDOT recommends new center pier foundation within 10 years to remedy existing scour problem.		Minimizes risk of damage from uncontrolled breach. NHDOT recommends new center pier foundation within 10 years to remedy existing scour problem.	Minimizes risk of damage from uncontrolled breach. NHDOT recommends new center pier foundation within 10 years to remedy existing scour problem.	Minimizes risk of damage from uncontrolled breach. NHDOT recommends new center pier foundation within 10 years to remedy existing scour problem.

**Note:** Costs are presented in 2005 US Dollars. All costs for full removal will be borne by the restoration partners. Costs for other alternatives are assumed to be the responsibility of the owner. Federal funding may be available for monitoring of fish passage effectiveness for the rock ramp alternative.